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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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909	7590	03/31/2006		
PILLSBURY WINTHROP SHAW PITTMAN, LLP P.O. BOX 10500 MCLEAN, VA 22102			EXAMINER ROSEN, NICHOLAS D	
			ART UNIT 3625	PAPER NUMBER

DATE MAILED: 03/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/706,097

Applicant(s)

WELLER ET AL.

Examiner

Nicholas D. Rosen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,10-12 and 69-80 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 70-80 is/are allowed.
- 6) ☒ Claim(s) 1-7,10-12 and 69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/04/2002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claims 1-7, 10-12, and 69-80 have been examined.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 23, 2006, has been entered.

Specification

The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01. There are numerous hyperlinks on pages 1 and 2 of the specification, which would be permitted if they were disabled, e.g., "www.activeresearch.com" could be amended to "www dot activeresearch dot com".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 4, 5, 6, 7, and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over the article "Perfect Launches Advanced B2B Sourcing Solution – PerfectMarket," hereinafter "Perfect Launches," in view of "Tools for Making Acute Risk Decision with Chemical Process Safety Applications," hereinafter "Tools," Brodsky et al. (U.S. Patent 6,751,597), and Greening et al. (U.S. Patent Application Publication 2001/0013009). As per claim 1, "Perfect Launches" discloses a computer-implemented decision analysis system that facilitates decision making by integrating a values-based supply component for sellers using value optimization algorithms that enable the system to identify beneficial commercial transactions for participating parties, the system comprising: means for creating a demand component comprising at least one demand-oriented, values-based decision analysis component, the demand component being based on: (i) a set of product or service characteristics and qualities; (ii) a set of product or service demand values associated with a buyer; (iii) a set of buyer demand values associated with the buyer and a quantifiable metric associated with each demand value;

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and (vi) a set of buyer alternatives that represent at least one of products and services the buyer is capable of purchasing (entire article, especially the paragraph beginning "Architected by renowned"). "Perfect Launches" does not expressly disclose (iv) a set of demand value tradeoffs showing how the buyer would trade one product or service demand value for another product or service demand value and showing how product or service demand values mathematically relate to one common financial metric, but does disclose automating the complex negotiation between buyers and suppliers on multiple weighted dimensions to produce a single ranked list of offers that best meet the buyer's needs, implying that the prices and various non-price attributes of the seller offers have been reduced to one common metric by which they can be compared in accordance with the buyer's weighted preferences; this also implies, in part (ii), that the product or service demand values associated with the buyer and resulting from the set of product or service characteristics and qualities have a quantifiable metric associated with the various values. "Perfect Launches" does not disclose (v) a set of demand information components, each defined in terms of a probability distribution, but it is well known to define components of expected utility in terms of probability, as taught, for example, by "Tools" (pages 304-307). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to have the demand components be based on a set of demand information components, each defined in terms of a probability distribution, for the obvious advantage of taking into account the probabilistic nature of much of human knowledge.

“Perfect Launches” does not expressly disclose that the buyer demand values are predetermined by the buyer independent of the product or service characteristics and qualities, but it is well known to take predetermined buyer values independent of the product or service characteristics and qualities into account in recommending products to buyers, as taught, for example, by Greening (Abstract, paragraphs 14-21). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant’s invention for the buyer demand values to be thus predetermined and independent, for the stated advantage of making recommendations in accordance with buyers’ tastes, and marketing accordingly.

“Perfect Launches” does not disclose means for creating a supply component corresponding to the demand component, but Brodsky teaches matchmaking optimization system for matching buyers and sellers together, recommending a set of buyers to a manufacturer as well as suppliers to a buyer (column 5, lines 23-60), making such a supply component obvious to one of ordinary skill in the art of electronic commerce at the time of applicant’s invention, for the stated advantage of matching buyers to suppliers as well as vice versa. Likewise, Brodsky’s disclosure of matchmaking between buyers and sellers (Abstract; column 5, lines 23-60) makes obvious means for combining the demand values, the supply values, the various tradeoffs, etc., for the same stated advantage.

“Perfect Launches” does not disclose means for performing sensitivity analysis to show how the risk and return characteristics of the buyer alternatives and the seller alternatives change as the product or service demand values, the product or service

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supply values, etc. change, but such sensitivity analysis is well known, as taught by "Tools," (pages 315-320). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to include means for performing sensitivity analysis, for the stated advantage of determining which variables tend to have greatest impact on the final results, simplifying the analysis, and reducing the number of alternatives, and providing insights that guide subsequent work.

As per claim 4, "Perfect Launches" discloses assisting a customer in choosing a product among a plurality of products (whole article), as does Brodsky (more explicitly disclosing choosing a product as well as choosing a supplier, and consequently a product made by that supplier; column 7, line 63, through column 8, line 6).

As per claim 5, and also claim 7, and (with a further reference) claim 11, "Perfect Launches" does not expressly disclose an object-oriented analytical model, but does disclose mathematical and logical analysis, and thus an analytical model, while Brodsky teaches object-oriented processes (column 6, lines 42-51). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to use an object-oriented model, for the obvious advantage of accomplishing a computer-implemented process by standard programming techniques and languages.

As per claim 6, "Perfect Launches" does not expressly disclose a sell component for assisting a user in determining how to offer already built products to customers (although the products for which sellers make custom offers could surely be already built products), but Brodsky, in addition to teaching a supply component for sellers,

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teaches that a seller may offer the products in its catalog, which are normally already built products (column 4, lines 57-66). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to include a sell component for assisting a user in determining how to offer already built products to customers, for the stated advantage of helping users profit from selling items that they have for sale.

As per claim 69, "Perfect Launches" does not expressly disclose that the at least one demand-oriented, values-based decision analysis component comprises a buy component and a sell component, but Brodsky teaches components for arranging both purchases and sales (column 4, lines 54-66; column 5, lines 23-60). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to include both a buy component and a sell component, for the stated advantage of aiding users in both buying items they wish to buy and selling items they wish to sell.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Perfect Launches," "Tools," Brodsky, and Greening as applied to claim 1 above, and further in view of official notice. As per claim 2, "Perfect Launches" does not expressly disclose an object-oriented analytical model, but does disclose mathematical and logical analysis, and thus an analytical model, while Brodsky teaches object-oriented processes (column 6, lines 42-51). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to use

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an object-oriented model, for the obvious advantage of accomplishing a computer-implemented process by standard programming techniques and languages.

"Perfect Launches" does not disclose that the analytical model shows graphically and mathematically how the demand values, the supply values, the buyer information components, and the seller information components are related to calculate the demand value tradeoffs, the supply value tradeoffs, risk and return, but official notice is taken that it is well known for computer programs and packages to show information graphically and mathematically. Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to have the analytical model show graphically and mathematically how the demand values, the supply values, etc., are related to calculate the demand value tradeoffs, the supply value tradeoffs, risk and return, for the obvious advantage of making relevant information readily available and comprehensible to users.

As per claim 3, "Perfect Launches" does disclose collecting user information while assisting users in a commercial decision making process (first and second paragraphs). Given the existence and availability of data, one can take the view that each object-oriented analytical model is able to share the user information with other object-oriented analytical models, whether or not it actually does so, and the particulars of what the user information collected includes are merely non-functional descriptive material, since the claim does not recite specifically what is done with the information that gives weight to the specified particulars. Even if claim 3 is to be read more narrowly, official notice is taken that it is well known to use data gathered in the course

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of users' shopping, web-surfing, etc., to direct future advertisements, offers, etc. to the users, and/or to analyze the demand for products, the effectiveness of promotions, etc. Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to share the user information with other analytical models, for the obvious advantage of determining how best to direct future advertisements, offers, etc. to the users, and/or to analyze the demand for products, the effectiveness of promotions, etc.

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Perfect Launches," "Tools," Brodsky, and Greening as applied to claim 1 above, and further in view of Eynon et al. (U.S. Patent 6,714,937). As per claim 10, "Perfect Launches" does not expressly disclose that the analysis component comprises a build component for assisting a user in determining products to build, but it is well known to assist users in determine products to build, e.g., by providing customized orders, as taught, for example, by Eynon (Abstract). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to include a build component, for the stated advantage of configuring products in accordance with the purchasers' desires. (For claim 11, see rejection of claim 5, above.)

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Perfect Launches," "Tools," Brodsky, and Greening as applied to claim 1 above, and further in view of official notice. "Perfect Launches" does not disclose that feedback loops are created so that demand information gathered by the demand component in the process

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of helping customers make purchase decisions is utilized by the supply component, but discloses gathering demand information in the process of helping customers make purchase decisions, and utilizing this information to provide supplier information.

Official notice is taken that it is well known to create feedback loops (e.g., asking further questions based on a user's answer to earlier questions, or providing further information, questions, etc., based on products which a user has requested or purchased). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to create feedback loops for the purpose, for the obvious advantage of effectively gathering relevant information.

"Perfect Launches" does not expressly disclose utilizing supply information gathered by the supply component in the process of helping providers make, build, or offer products or decisions products, but Brodsky teaches that supply information gathered by a supply component in the process of helping providers make, build, or offer products (and decisions) is utilized in matching suppliers and purchasers, and therefore utilized by a demand component (Abstract; column 4, line 44, through column 5, line 60). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to thus utilize supply information, for the stated purpose of recommending mutually agreeable transactions.

It is noted that claims 1-7, 10-12, and 69 (claim 1 in particular) use "means for" language. Nonetheless, they are not treated as invoking 35 U.S.C. 112, sixth paragraph. If Applicant wishes to invoke 35 U.S.C. 112, sixth paragraph, Applicant

should provide an explicit statement to that effect. 35 U.S.C. 112, sixth paragraph states:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

Allowable Subject Matter

Claims 70-80 are allowed.

The following is an examiner's statement of reasons for allowance: The closest prior art of record, the article "Perfect Launches Advanced B2B Sourcing Solution – PerfectMarket," hereinafter "Perfect Launches," discloses a computer-implemented decision analysis system that facilitates decision making by integrating a values-based supply component for sellers using value optimization algorithms that enable the system to identify beneficial commercial transactions for participating parties, the system comprising: means for creating a demand component comprising at least one demand-oriented, values-based decision analysis component, the demand component being based on: (i) a set of product or service characteristics and qualities; and (viii) a set of buyer alternatives that represent at least one of products and services the buyer is capable of purchasing (entire article, especially the paragraph beginning "Architected by renowned"). "Perfect Launches" does not expressly disclose (iv) a set of buyer value tradeoffs showing how the buyer would trade one demand value for another demand value and showing how all demand values mathematically relate to one common

financial metric, but does disclose automating the complex negotiation between buyers and suppliers on multiple weighted dimensions to produce a single ranked list of offers that best meet the buyer's needs, implying (iv) the set of buyer values tradeoffs; this also implies, in part (ii), that there is a set of specific buyer demand values that quantitatively measure a buyer's relative preference for each product or service characteristic and quality. "Perfect Launches" does not disclose (v) a set of buyer-specific information components, representing a buyer's unique beliefs about a product or service, codified in terms of a probability or probability distribution, but it is well known to define components of expected utility in terms of probability, as taught, for example, by "Tools for Making Acute Risk Decision with Chemical Process Safety Applications" (pages 304-307).

"Perfect Launches" does not disclose (iii) a set of general buyer demand values, predetermined by the buyer independently of the product or service characteristics and qualities, that quantitatively measure a buyer's preferences for making decisions, including risk preference, time value of money, preferred way to process information, and personality type, but Wallman (U.S. Patent 6,996,539) teaches recommending a portfolio based on a buyer's risk preference and other preferences, and also using collaborative filtering to compare the buyer's values with the values of other buyers (as per part (vi)) (column 21, lines 13-45). Horvitz et al. (U.S. Patent 6,655,963) disclose a recommendation technique using personality diagnosis (Abstract). Greening et al. (U.S. Patent Application Publication 2001/0013009) provides another example of collaborative filtering using general buyer values.

"Perfect Launches" does not disclose a set of general information supply components gathered from across all values-based supply components created by sellers, prioritized by the buyer's specific values and the similarity of the products and services the buyer has identified as alternatives with the products and services the seller is selling, but Bezos et al. (U.S. Patent Application Publication 2005/0261987) disclose content-based filtering to identify products similar to those purchased or highly rated by a user (paragraph 5).

"Perfect Launches" does not disclose means for creating a supply component corresponding to the demand component, but Brodsky teaches matchmaking optimization system for matching buyers and sellers together, recommending a set of buyers to a manufacturer as well as suppliers to a buyer (column 5, lines 23-60). Likewise, Brodsky's disclosure of matchmaking between buyers and sellers (Abstract; column 5, lines 23-60) makes obvious means for combining the buyer demand values, the seller supply values, the various tradeoffs, etc.

"Perfect Launches" does not disclose means for performing sensitivity analysis to show how the risk and return characteristics of the buyer alternatives and the seller alternatives change as the product or service demand values, the product or service supply values, etc. change, but such sensitivity analysis is well known, as taught by "Tools for Making Acute Risk Decision with Chemical Process Safety Applications," (pages 315-320).

However, no prior art of record discloses a decision analysis system comprising and using a set of general buyer demand values including risk preference, time value of

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money, preferred way to process information, and personality type, nor a corresponding set of seller supply values. Furthermore, although reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention (*In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991)), the considerable number of references that would be required to plausibly reconstruct claim 70, and the lack of clear teachings or suggestions in the prior art references for incorporating some of the elements taught in the various references into the system recited in claim 70, are held to carry weight in making claim 70 nonobvious.

It is noted that claims 70-80 (claim 70 in particular) use "means for" language. Nonetheless, they are not treated as invoking 35 U.S.C. 112, sixth paragraph. If Applicant wishes to invoke 35 U.S.C. 112, sixth paragraph, Applicant should provide an explicit statement to that effect. 35 U.S.C. 112, sixth paragraph states:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection. Applicant argues, with regard to claim 1, that while "Perfect Launches" discloses "non-price attributes such as quality, customization, and delivery time," these are nonetheless attributes directly related to the actual product or service, not predetermined buyer demand values that are independent of the products or services being offered. Examiner replies that "Perfect Launches does not disclose such demand values are independent of the products or services being offered, but the use of general buyer demand values in marketing to buyers is well known, as taught by Greening, which has been made of record in response to Applicant's amendment of claim 1.

Claim 70 and its dependents, however, have been found allowable.

The common knowledge or well-known in the art statements in the previous office action are taken to be admitted prior art, because Applicant did not traverse Examiner's taking of official notice.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Horvitz et al. (U.S. Patent 6,655,963) disclose methods and apparatus for predicting and selectively preferences based on personality diagnosis. Wallman (U.S. Patent 6,801,199) discloses a method and apparatus for interacting with investors to create investment portfolios. Wallman (U.S. Patent 6,996,539) discloses a

method and apparatus for enabling investors or others to create and manage a portfolio of securities or other assets or liabilities on a cost effective basis.

Young et al. (U.S. Patent Application Publication 2002/0111922) disclose an electronic markets business interchange system and method. Bezos et al. (U.S. Patent Application Publication 2005/0261987) disclose a notification service for assisting users in selecting items from an electronic catalog.

Raleigh ("Computers Are Telling Managers How to Work Better, but Is Anybody Listening? The Hard Facts on Management Software") discloses use of "The Art of Negotiating" program for helping users define their objectives, etc. McCune ("Presto! A Business Plan") discloses use of the "Negotiator Pro" program. Woodward et al., ("Analyzing and Executing Mergers and Acquisitions") disclose identifying potential buyers and sellers based on risk preference and other selection criteria. The anonymous article, "Leading Online E-Commerce and Entertainment Retailers Endorse Andromedia's LikeMinds Personalization Server 3.0," discloses use of collaborative filtering that takes the personality of each user into account.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas D. Rosen, whose telephone number is 571-272-6762. The examiner can normally be reached on 8:30 AM - 5:00 PM, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's current acting supervisor, Mark Fadok, can be reached at 571-272-6755. The fax phone number for the organization where this application or proceeding is assigned is

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571-273-8300. Non-official/draft communications can be faxed to the examiner at 571-273-6762.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nicholas D. Rosen
NICHOLAS D. ROSEN
PRIMARY EXAMINER

March 29, 2006